BEVERAGE SYSTEM
TROUBLESHOOTING INDEX

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TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Nothing happens when the beverage valve is activated	Is the key switch lock turned on?	Turn switch on
	Is the dispenser cord plugged in?	Plug dispenser into wall receptacle
	Is power to the electrical outlet?	Restore power to receptacle
	Is the valve transformer OK?	Replace the valve transformer
	Is the valve switch defective?	Check and replace the valve switch
	Is the valve properly connected?	Is the power wires to the switch connected?
	Is product to the beverage valve?	Turn on the valve back block shut off

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Syrup only is dispensed from all beverage valves	Is the carbonator plugged in?	Carbonator must be plugged in
	Is the water supply turned on?	The minimum water supply must be provided.
	Is the CO_2 supply turned on?	Check CO_2 supply for availability. Replace or refill
	Is the water line frozen?	Allow water line to thaw out. Repair cause of frozen line. Discontinue use of "super cooled" ice for cold plate cooling
	Do you hear a sound from the water side of the valve?	Lack of a sound at this test indicates frozen water line. A sound indicates carbonator problems.
	Are the CO_2 pressures set correctly?	The CO_2 pressures may be too high. Check and set all system pressures to the correct settings.

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Syrup only is dispensed from all beverage valves	See also carbonator trouble shooting section	See also carbonator trouble shooting section
	Is an obstruction in the water line with the lines connected to the correct stub?	If the water system is obstructed or not connected correctly, reconnect the lines to the proper tubing stubs or remove the obstruction to allow water flow

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Water only is dispensed at all beverage valves	Do you have enough CO_2 gas in the tank?	Replace or refill the CO_2 supply
	Do you have any syrup?	Check and replace any empty syrup containers
	Are the syrup connectors clean?	Clean and reinstall the connectors
	Are system pressures set correctly?	Adjust and reset pressures to their proper settings
	Are the syrup connectors properly connected?	Remove the connectors and properly reinstall the connectors
	Is the syrup line frozen?	Allow the syrup line to thaw out. Repair cause of frozen line

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Water only is dispensed at one or two valves?	Is an obstruction in the water line with the lines connected to the correct stub?	If the water system is obstructed or not connected correctly, reconnect the lines to the proper tubing stubs or remove the obstruction to allow water flow.
	Is the water line frozen?	Allow water line to thaw out. Repair cause of frozen line
	Is the back block shut off valve closed?	Check the back block shut off valve. If it is closed, open the valve
	Is electric getting through the valve solenoid when energized?	Repair or replace the wiring or solenoid coil
	Are the connectors to the syrup clean and properly attached?	Clean the syrup connector & correctly attach the connector to the syrup connector
	Is the syrup system obstructed or lines installed improperly?	Reconnect the lines to the proper tubing stubs or remove the obstruction to allow syrup flow

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Water only is dispensed at one or two valves?	Do you have a full syrup container connected?	Replace if necessary
	Are valves in the syrup system open?	Make sure all connections with shut offs are made good and tight
		Check the back block shut off valve. If it is closed, open the valve
	Are the B-I-B pumps (if used) operating?	See B-I-B pump trouble shooting section
	Is electric getting through the valve solenoid when energized?	Repair or replace
	Is the syrup line frozen?	If the syrup line is frozen, allow syrup line to thaw out. Repair cause of frozen line.
	Is the syrup flow control of the beverage valve sticking?	Disassemble and clean or replace

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Poor Carbonation	Is CO_2 pressure to the carbonator properly set?	Reset CO2 pressure to 100-110 PSI
	Is the carbonator air locked (all CO_2 and no water in the tank)?	Turn off carbonator and CO_2. Release vent on the tank until water comes out. Turn carbonator and CO_2 on
	Is the inlet water pressure to the carbonator above the minimum?	Minimum inlet water pressure is 20 PSI
	Is the carbonator inlet water temperature too high?	Inlet temperature of the water to the carbonator should be no more than 100° F

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Poor Carbonation	Do you have CO_2 Gas?	Replace or refill CO_2 tank
	Is the CO_2 pressure a minimum of 100 PSI to the carbonator?	Reset pressure regulator to the proper pressure
	Is the carbonator tank air locked?	Open carbonator vent check until water streams out
	Is the water pressure to the carbonator higher than the CO_2 pressure?	Reduce carbonator inlet water pressure to 10# below CO_2 pressure
	Is the dispensed beverage temperature above 40° F?	Lower beverage temperature to 36° F to 40° F
	Is supply water pressure to carbonator 20 to 75 PSI?	Install regulator or booster pump to maintain proper pressures

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Beverage tastes weak	Do you have enough CO_2?	Replace or refill your CO_2 supply
	Are your system pressures set correctly?	Check & correctly set all system pressures
	Do you have a sufficient supply of syrup?	Replace empty syrup containers
	Is the syrup flow control of beverage valve sticking?	Disassemble and clean or replace
	Has the syrup supply been obstructed?	Repair or replace the obstructed item
	Is the water flow control set improperly?	Set the volume of water through the beverage valve at the flow rate prescribed by the valve manufacturer then brix the valve.
	Is the brix of the valve properly set?	Brix all valves
	Are nozzles and diffusers dirty?	Remove & clean all nozzles & diffusers

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Beverage tastes sweet	Are your system pressures set correctly?	Check & correctly set all system pressures
	Can your carbonator handle the volume of drinks you are dispensing?	Check the carbonator manufacturer's specifications
	Is an obstruction in the water supply line?	Repair or replace the obstructed item
	Are nozzles and diffusers dirty?	Remove and clean all nozzles and diffusers
	Is the brix of the valve set correctly?	Brix all beverage valves

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Beverage has an off-taste	Do you notice the taste on every (most) beverage(s) in the dispenser?	Isolate the taste in the common ater line before the dispenser. Repair or replace components as necessary. Install taste removal water filter in the water line to carbonator
	Do you notice the taste on one or two valves on the water component of the beverage?	Isolate problem, flush and sanitize lines with beverage valves removed
	Do you notice the taste on one valve on the syrup component of the beverage?	Check the beverage taste at the bulk container. If it is good, flush and sanitize the syrup lines. If syrup is bad, flush and sanitize syrup lines and replace syrup.
	Is the carbonator inlet check valve holding carbonated water out of the regular water system?	Replace check valve if leaking through

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Beverage has an off-taste	Are the beverage lines running through standing water?	Isolate the lines through the water. Remove the standing water, reroute the lines, or replace the lines with non permeable tubing
	Does each syrup container feed the correct syrup line?	Check each syrup line for proper syrup supply
	Are nozzles and diffusers dirty?	Remove and clean all nozzles and diffusers
	Is the brix of the valve set correctly?	Brix all beverage valves.
	Is the syrup supply fresh?	Most syrups should be used within 75 days of manufacture.

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Beverage valve does not maintain brix	Are the system pressures correct?	Check and adjust any pressures and inconsistent regulators
	Is air in the syrup delivery system?	Bleed air from the syrup delivery system
	Are the flow controls in the beverage valve sticking?	Clean or replace the beverage valve flow controls
	Is the B-I-B pump holding pressure?	Repair or replace B-I-B pump
	Are incoming water pressures constant?	Add water booster pump or pressure regulator to maintain

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Unusual amount of foaming on finished product	Is drink being drawn correctly?	Make sure cup is tilted with product flowing down the inside of the cup
	Is the dispensing nozzle or valve dirty?	Clean dispensing components
	Is too much CO_2 being added to the available water?	Check system CO_2 and water pressures & available water
	Is the ice super cooled?	Ice should be at room temperature for at least 30 minutes before using
	Is the reusable glass dirty or have soap film?	Clean utensils and thoroughly rinse
	Is soft water being supplied to the system?	Do not use commercially softened water for beverage systems
	Are the individual beverage components at the proper temperature?	All individual components should be more than 40° F each

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Unusual amount of foaming on finished product	Are the system pressures too high?	Reduce pressures to the recommended settings
	Is the drink too warm?	Dispensed beverage must be between 36° F to 40° F
	Are nozzles or diffusers dirty?	Remove and clean nozzles and diffusers
	Is the water for the postmix beverage being supplied through a water softener?	The post mix beverage water supply must be taken before the water softener

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
The beverage valve continues to operate after release	Is the valve lever (if equipped) sticking?	Replace or adjust the beverage valve lever to correct
	Is the push button actuator sticking?	Replace or adjust the beverage valve actuator
	Is the electric microswitch sticking?	Clean or replace the microswitch
	Is there something caught under the beverage valve pallet?	Clean or replace the beverage valve pallet and/or pallet seat
	Is the beverage valve pallet damaged?	Replace beverage valve pallet
	Is the electric solenoid plunger sticking?	Clean or replace solenoid

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Dispensed beverage is over 40° F	Is there ice on the cold plate (if equipped)?	Be sure ice covers the entire cold plate. Give the cold plate time to cool
	Has ice bridged over the cold plate (if equipped)?	Push ice down to ensure ice covers and contacts the entire cold plate
	Is standing water covering the cold plate (if equipped)?	Clean or unstop drain to the dispenser
	Has algae or other insulator covered the cold plate (if equipped) to prevent heat transfer?	Scrub and clean cold plate to remove insulators
	Does the system beverage temperature increase significantly between cooling point and dispensing point?	Locate source of heat gain. Repair or replace the cause of this added heat.

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
dispensed beverage is over 40° F	Is the refrigeration system (if equipped) plugged in or turned on?	Plug (or turn on) the refrigeration system if necessary
	Is electric power supplied to the receptacle or refrigeration system?	Restore power to the receptacle or refrigeration system
	Is the refrigeration system (if equipped) operating properly?	Repair or replace the cooling system
	Is the condenser of the refrigeration system (if equipped) clean?	Clean the refrigeration system, especially the condenser
	If this is an ice bank type system, has an ice bank formed?	Allow ice bank to form or repair refrigeration system
	If this is an ice bank system, is the agitator operating?	Locate the reason the agitator motor is not operating and repair

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Carbonator does not operate	Is the water turned on and the flow pressure is between 20 and 75 PSI?	Restore water supply within proper limits
	Is CO_2 turned on and pressures between 100 and 110 PSI?	Restore CO_2 supply to the carbonator within proper limits
	Is electric power supplied to the carbonator?	Restore electric to the outlet that supplies the carbonator with power
	Does the motor operate without the pump?	Remove the pump from the motor. Manually override carbonator controls to check operation of motor only. Replace pump or motor if necessary
	Does the motor operate but not pump water?	Lower the CO_2 pressure to the pump. If operates with lowered pressure, replace pump
	Is the water level control of the carbonator operating properly?	Repair or replace according to instructions provided by the carbonator manufacturer.

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
Carbonator does not operate	Is the carbonator level?	Reset carbonator so the base is level and flat

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
B-I-B pump will not start	Do you have syrup connected to the inlet hose of the pump?	Replace syrup container
	Is the connector to the Bag-in-Box properly connected?	Remove and properly reconnect the B-I-B connector
	CO_2 (or compressed air) supply interrupted	Check CO_2 (or compressed air) supply. Replace, refill, or turn on if necessary
	Is the gas pressure to the pump correctly set?	Adjust gas pressure to the recommended setting for the product

TROUBLE SHOOTING

Problem:	**Question**:	**Possible Solution:**
B-I-B pump constantly runs	Is air in the syrup delivery system?	Bleed air from the syrup delivery system
	Syrup leak on pump discharge line	Locate leak. Repair or replace leaking component
	Is B-I-B pump defective?	Replace the B-I-B syrup pump
	Is there air in the B-I-B bag?	Replace the B-I-B bag
	Is there a hole in the B-I-B bag?	Replace the B-I-B bag

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
B-I-B Pump operates but does not pump syrup	Is a beverage dispensing valve open?	Open beverage valve to allow syrup to flow through the system
	Is the B-I-B pump air locked?	Make sure B-I-B pumps are installed with the outlet port on top
	Is the syrup container coupling properly connected?	Remove and correctly reconnect the coupling to the Bag-in-box container
	Is there a hole in the B-I-B container?	Remove and replace the leaking syrup container
	Is the tubing from the B-I-B container to the pump full flow and not kinked?	Remove or repair kink, or replace hose

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
B-I-B pump does not supply enough syrup	Are the gas or air pressures supplied to the pump correct?	Check and correct any incorrect gas or air pressures
	Are the number of beverage valves served by the B-I-B pump within the B-I-B pump manufacturer's specifications?	Reduce the number of valves being served by the pump or replace the B-I-B pump
	Is the tubing in the syrup system sized properly for the line length?	Replace the syrup tubing with a larger diameter tubing

TROUBLE SHOOTING

Problem:	Question:	Possible Solution:
B-I-B pump rate of delivery is inconsistent	Is air in the syrup delivery system?	Bleed air from the syrup delivery system
	Does the check valve at the outlet of the B-I-B pump prevent back flow to the pump?	Replace the B-I-B pump